

NOTES ON THE BIOLOGY OF *Nephurus asper*

Gunther 1876

By Graeme Gow

DESCRIPTION:

The rough knob-tailed Gecko is the largest of the seven members of this genus (Cogger 1975), attaining a recorded maximum length of over 15 cm. It has been described as a grotesque species (Longman 1918) since it has extremely large head, a robust body covered with clusters of tubercles (which are more prominent on the nape, sides, back legs and dorsum), spindly legs and a short tail which terminates in a "bead-like" knob. The Dorsal colouration is grey or brown with or without irregular whitish crossbands. The ventral surface is white.

HABITAT PREFERENCES

Throughout this gecko's wide distribution I have always found it favours rocky areas, where it usually lives in a burrow beneath large boulders or well embedded rocks.

ACTIVITY

It emerges on warm nights to feed upon small insects and spiders. When stalking prey this gecko raises its body high off the ground and takes a few quick forward steps, then pauses momentarily, to measure the striking distance required to secure its prey.

DEFENSIVE BEHAVIOUR

When agitated it raises and lowers its body, at the same time twitching its tail. If attempts are made to handle this species, it becomes aggressive, and with mouth agape charges its adversary, and at the same time emitting low pitched vocalisations. It will bite if the opportunity arises but its jaws are too weak to inflict damage on an unwary finger! Unlike most other Australian geckoes, this species cannot cast its tail.



The Rough Knob-tailed Gecko (*Nephurus asper*)

REQUIREMENTS IN CAPTIVITY

I have found this species is easy to maintain in captivity provided it is given a good depth of sandy soil and suitable rock to burrow under. Its food preference is cockroaches, although small grasshoppers and skinks are readily consumed.

REPRODUCTION

A large female (total length 13.4 cm) was collected by N. Boyd at Katherine, N.T. on 09.11.73 at 22 00 hours. The temperature was 21° C, and it was raining lightly. This specimen was observed to be gravid, as two large well developed eggs were clearly visible; the lizard had apparently just left its burrow as reddish soil covered its body, especially on the head.

The female was inspected daily until 28.11.73 when it became that it was close to laying. A small glass aquarium was then prepared with moist peat moss to a depth of about 5 centimetres. On the 2.12.73 the lizard became very active and for two hours explored all aspect of the ground surface. Finally a corner site was selected and then a hole approximately 2.5. centimetres deep was initially excavated. A laying position was then assumed by standing high on the front legs and arching the back downwards so that the vent was immediately above the hole. This position was maintained and abandoned several times over the next two days. On the 5.12.73 it was observed that the entire hole had been filled in and the specimen had layed its eggs; the surface of the peat moss was without noticeable signs of an excavation having been made. The female was then removed and the cage examined carefully for its contents; the peat moss was also removed which revealed two large eggs deposited on the cage bottom. The two eggs measured 30 mm x 16.5 mm and 29 mm x 15.5 mm respectively.

When the female began excavating the egg chamber, it appeared that it was complete at ca. 2.5cm in depth. However, the eggs were found at the base of the peat moss, depth ca.5 cm, as the eggs were resting on the bottom of the aquarium. It may indicate that a deeper burrow was intended.

Both eggs were then placed in a small container of damp peat moss, and appeared to be developing during the following weeks. However, both were destroyed by insects before they could hatch.



Eggs of the Rough Knob-tailed Gecko (*Nephurus asper*).

LITERATURE

- BUSTARD, R. (1970) - Australian Lizards - Collins Sydney and London.
COGGER, H.G. (1975) - Reptiles and Amphibians of Australia, Reed, Sydney.
LONGMAN, Heber A. (1918) - Notes on some Queensland and Papuan Reptiles, Mem. Qld. Mus. 6:37.
McPHEE D.R. (1963) - Some Common Snakes and Lizards of Australia, Jacaranda, Brisbane.